

Diagram No. 1115-3

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey Wire Drag

Field No. R/H-40-2-74

Office No. FE-276WD

LOCALITY

Alabama

General Locality Gulf Of Mexico

Locality Approaches to Mobile Bay

OHIEF OF PARTY
COR L.E. Pickens

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June 25, 1986

See Record of Application for sign of

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U.S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY

REGISTER NO.

H-9420 WD FE-276 WD

HYDROGRAPHIC TITLE SHEET

this form, FIELD NO.

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

RH 40-2-74

State ALABAMA
General locality MOBILE BAY Gulf of Mexico
Locality MOBILE BAY ENTRANCE Approaches to Mobile Bay
Scale 1:40,000 Date of survey July, 8, 1974 - July 18, 1974
Instructions dated Nov. 12. 1973 Project No. OPR-479 - RU/HE-74
essel NOAA Ships RUDE & HECK
Chief of party CDR L.E. PICKENS
Surveyed by CDR L.E. PICKENS — See L. Personnel & Equipment. See section I. of this report.
Soundings taken by echo sounder, hand lead, XXXX Wire Drag
Graphic record scaled by
Graphic record checked by
Protracted by
Soundings penciled by
oundings in MANNAX feet at MLW XMXXX Gulf Coast Low Water Datum
REMARKS: Pracessing has been modified and limited- See the Modified
Evaluation Report.
STANDANDS CK'D 7-186
. NWOIS & SURT Chefred of 19/66 55V

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FE-276 WD

TEXT 2/H-40-2-74

A. AUTHORITY

This project was authorized under Project Instructions OPR-479-RU/HE-74, Wire Drag, Investigations for the Safety Fairways, Gulf of Mexico dated 12 November 1973. Also applicable were subsequent Change #1 dated 11 December 1973, Change #2 dated 11 December 1973, Change #3 dated 21 January 1974, and a memo from C3x4 dated 22 April 1974. In addition, Change No. 1 for project OPR-479-RU/HE-73, dated 16 April 1973 pertained. (See Attachment VII).

B. CHARACTER AND LIMITS OF THE WORK
The purpose of this project was to clear the anchorage area off
the entrance to Mobile Bay and to investigate several items in
the area. These items included ITEM 11B (in two parts), ITEM 8B
and ITEM 10B, all of which are listed in Change #1 of OPR-479-RU/
HE-73. (See Attachment VIII). Also investigated were the F/V
GRACIE L which was located in last years work and ITEM 59 and 60
as labled on the boatsheet.—Item 8B was not investigated on this survey.

This project covered areas charted on the following charts: C&GS 1115, C&GS 1266, and C&GS 872-SC.

- C. CONTROL AND SHORELINE See also the Maditied Evaluation Report. Raydist DR-S Range-Range control was used. The Raydist was operating on a frequency of 3300.4KHz, giving a lane width of 45.39904 meters. Two Raydist shore stations, WIMPY 2, and MOB were utilized for control. MOB, located on Mobile Point served as the Green Station. WIMPY 2, located on the #1 reference disc for station WIMPY, approximately 1.7 miles west of Alabama Point, Alabama, served as the Red station. There was no shore line on the sheet. Note should be made that the reference arcs are inked in the wrong color on the sheet. That is to say, the red inked arcs represent the green arcs and visa versa. Upon completion of the survey, both stations were dismantled. WIMPY 2, 1s recoverable but MOB, having been cut in by ships personnel, is not. Further station information may be found in Attachment I. A listing of all signals used is in Attachment I. Note: The boatsheet could not be located.
- D. DATE OF SURVEY
 Operations for OPR-479-RU/HE-74, Sheet 40-2-74 commenced on July
 8, 1974 and were completed on July 18, 1974.

E. TIDAL REDUCERS

Preliminary reduction of each days work was done using predicted tides. Actual tide data has been supplied by the Rockville Office. Smooth tides have been applied to the verified data.

F. JUNCTIONS

The only junctions occurred between the anchorage area and the Safety Fairways area covered last year on RH-40-1-73. No less than 600 ft. overlap exists with this prior survey, based on A&D Sheet 40-1-73. H-9374 WD (1973) See Sections 5. \$6. of the Modified Evaluation Report.

G. SPLITS - Not determined during Modified and Limited Processing. N.A.

H. GROUNDINGS AND HANGS

The hangs encountered were as follows: See Section 6. of the Modified Evaluation 1.) B DAY: A double hang. One hang proved to be the remains Report,

- 1.) B DAY: A double hang. One hang proved to be the remains of a wooden vessel, while the other was a pile of assorted junk. Neither is considered a hazard to navigation.
- 2.) C DAY: The remains of the F/V GRACIE L, sitting approximately 10 ft. off the bottom. This was cleared to a depth of 52.5 ft. in 62 ft. of water. Considered a hazard. See Attachment IV.

GENERAL NOTES

All calibrations were made by circle calibration at Sand Island Light. The range used in last years work was found to be moved. Lane counts were made on several buoys at frequent intervals. The distance from the Raydist antenna to the end buoy varied as follows: for an 800 foot towline, 265 meters; for a 1000 foot towline, 326 meters.

The following should be noted when verifying this survey: See section 6. of the B DAY - July 9, 1974 - Strip 1 Modified Evaluation Report.

This strip was used only for hang information and consequently was not developed. It located the two obstructions. of ITEM 11B:

- B DAY Strip 3 and D DAY Strip 1
 Both these drags became unmanageable soon after set out and were subsequently picked up and re-set.
- H DAY July 18, 1974 Strip 3
 This was an attempt to clear ITEM 13B located in Mobile
 Bav. Visual control was used. The current from the
 nearby channel created unique and uncontrollable lift
 problems. Subsequently the strip has been "thrown out",
 though included in the records.
- H DAY A visual fix was taken to position the charted mast (ITEM 60) protruding out of the water in the entrance channel to Mobile Bay. The mast plotted on its reported position.

It should also be noted that the overwhelming majority of tests were TOB and most drags exhibited a great deal of lift. The effort in testing was directed toward obtaining the maximum number

of tests for a maximum number of sections. Consequently, rather than retesting when a TOB was encountered, the testers were directed to the next section. Considering the nature of the tester, a TOB test is a good indication that the wire is close to the bottom. In the work herein submitted, lift was calculated using TOB tests as well as normal tests. The normal tests were consistant and the highest test in the section is what was applied to the drag when it was processed. In the case of a section which failed to have a "clean" test, i.e. all tests were TOB, the highest lift recorded with the TOB was used. For example, if there were 3 tests in a section with the worst lift situation being 2.3' LIFT-TOB, then 2.5' of lift was used in the processing of this drag. This testing procedure was adopted at the discression of the Commanding Officer. If any doubt existed as to whether or not the area of any drag had been cleared, then another drag was set out to cover the area in question.

The lift problem was related to the peculiar current situation in this area. As is more elaborately described in the following section, currents were changeable and somewhat unpredictable. This resulted in some very unusual dragging conditions, and excessive lift problems.

As a final note, the available hydro proved to be extremely inadequate for wire drag and contradicted the ships hydro which was conducted. This hydro wasn't recorded in sounding volumes nor did we keep the fathometer records. We applied a 9.0 initial to the hydro for a corrector. This took into account squat and settlement and velocity. These sounding lines will verify our settling of the uprights. Two small plots of soundings are included in the field records. No verification nor comparisons were accomplished on these plots.

As has been mentioned previously in this report, the currents in this area can be described, at best, as being peculiar. This seems to be directly related to the water movements in and out of Mobile Bay. Other factors may also be present. Not only was the direction of the prevailing current constantly changing and unpredictable, but there seemed to be several different currents at several different depths. As a result, multiple current tests were required, checking direction and velocity at varying depths. In spite of these efforts, a variety of lift and sag problems presented themselves. The ships proved difficult to maneuver, and usual balancing techniques had no effect on the lift situation. As has been recommended in prior surveys of this area, extensive current surveys should be conducted in this area before further wire drag surveys are scheduled. — Concur

K. DISCREPANCIES AND COMPARISONS WITH RECENT SURVEYS AND CHARTS As has been mentioned the available hydro and current data pertaining to this area was scanty and practically of no use in conducting the survey. The heavy currents and changing bottom proved to be the major difficulties encountered during the project. See section 6, of the Modified Evaluation Report,

- The following summarizes the obstructions encountered: See section 6. of the 18.8" 02.9" Modified Evaluation Report.

 1.) F/V GRACIE L, Lat. 30°07.23", Long. 88°01.03" this was located during last season's work (see ARH-40-1-73) and at the time was found to have a mast extending to within 24 feet of the surface. Upon investigation this year, it was found that the mast had been broken off, and the vessel now has 52.5 feet of water above her, based on predicted tides. vessel is somewhat broken up, but does present a hazard both to shipping interests and to shrimp fishermen, as evidenced by the large number of nets found strewn about the wreck.
- 2.) The charted mast standing out of the water, ITEM 60, Lat. 30°12'77, Long. 88°01.8' is charted correctly and does present a hazard.
- 3.) ITEM 11B
- , 16.5" 10.6 a) Wooden wreck associated Lat. 30°01'36', Long. 88°07'16' This may indeed be the freighter TULSA, but it is impossible to tell, as all that remains is some wooden framework. This does present a hazard to fishing interests. It was cleared to a depth of 67.5 feet based on predicted tides.
 - 03.7" b) Fish Haven, Lat. 30°01/1N, Long. 88°06/5W. This was found to be a pile of junk on the bottom. This again presents a hazard to bottom trawl fishermen. It was cleared to a depth of 67. feet based on predicted tides.

L. PERSONNEL AND EQUIPMENT

The ship RUDE served as the guide vessel throughout the survey. Each ship used a Raytheon DE-723 fathometer for soundings. Tests were conducted by the HECK's launch and both skiffs. Normal wire drag hardware was used with no significant problems.

Officers participating in this survey were CDR L.E. Pickens, LCDR W.M. Noble, LTJG K.F. VanTrain, ENS G.M. Albertson, and ENS C.E. Mericas.

M. MISCELLANEOUS

Pleasant weather was enjoyed throughout the project. The outstanding difficulty was encountered with the currents and subsequent lift problems. It was usually a matter of outguessing the currents.

N. SUMMARY Three wreeks and
The project The project/encompassed 8 days of work that data was taken and accepted. Four obstructions were located, that is the F/V GRACIE L, the charted mast ITEM 60, and the two obstructions of ITEM 11B, the wooden wreck and the fish haven down All three present a danger to ship trawlers, but only the GRACIE L and the mast can be considered a hazard to navigation, the GRACIE L rising to within 52.5 feet of the surface, based on predicted tides. Once again, current and hydro data provided were inadequate. Tide predictions didn't seem to correspond with actual events.

O. RECOMMENDATIONS

It is recommended that the GRACIE L be recharted at the new cleared depth. All other obstructions are adequately represented on current charts.

ITEM 10B was not found, and the area was adequately cleared. sequently, it is recommended that this be removed from the charts as a hazard. ITEM 59 was also not found, and similar action would, be indicated.

It is also recommended the current investigations be conducted in this area, in as much as present data is not truly representative of actual events. - Concur

See section ,6, of the Mdified Evaluation Report.

LIST OF ATTACHMENTS

I. A. SHORE STATION POSITIONS

B. VISUAL CONTROLS

*II. PROGRESS SKETCH

III. FLOATING AIDS TO NAVIGATION

IV. GROUNDINGS AND HANGS

v. *(RAYDIST CORRECTORS) AND STATISTICS

*VI. CALIBRATION VALUES

*VII. PROJECT INSTRUCTIONS

VIII. OTHER PERTINENT INSTRUCTIONS - Change No. 1 to OPR-479-RU/HE-93

IX. CHART CORRECTIONS

X. BOATSHEET AND ELECTRONIC CONTROL PARAMETER SHEETS

Signal List

*= Data removed from the Descriptive Report and filed with the field records.

ATTACHMENT I

A. SHORE STATION RAYDIST POSITIONS

STATION NAME	LATITUDE	LONGITUDE	REMARKS
WIMPY 2,1949 RM1 MOB	30°13'21.422"		GREEN STATION
B. VISUAL CONTROL	STATIONS	field position, no records available	e, cannot be verified.
STATION NAME	LATITUDE	LONGITUDE	NO. ON SHEET
DAUPHIN ISLAND WATER TANK, 1956	30°15'11.959"/	88°06'44.901"	1
SAND ISLAND LIGHTHOUSE, 1930	30°11'14.8260"	88°03'02.2355"	2
DAUPHIN ISLAND, USAF E. RADAR DOME, 1960	30°14'59.635"/	88°04'42.266"\/	3
MOBILE POINT C.G. RADIO TOWER, 1958	30°13'37.658"	88°01'24.859"	5
DAUPHIN ISLAND BRIDG NORTH AERO OBSTR. LI	^{6E} 30°17' 21.201"	88°07'43.458"	
MOBILE PT. RANGE REAR LT.,1958	30° 13′ 39.375″	88°01′ 27.(47″	

ATTACHMENT III FLOATING AIDS TO NAVIGATION

AID	RED	GREEN	DATE
MOBILE BAY ENTRANCE BUOY "1"	1119.5	232.0	8 JULY 1974
BW OBSTRUCTION BUOY OFF PERDIDO PASS	315.6	991.3	12 JULY 1974
PENSACOLA ENTRANCE BUOY "3"	560.87	1550.4	12 JULY 1974

Not verified - See section 7.6. of the Modified Evaluation Report.

ATTACHMENT IV
GROUNDINGS AND HANGS

POS. NO. &		appro	ximate	Hang GROUNDED	CLEARED	CLEARED	CHARTED
DAY	BUOY NO.	LATITUDE	LONGITUDE	EFF. DEPTH	BY STRIP	EFF. DEPTH	SOUNDING DEPTH
A-1	8-9	30-04.01	88-05.01	69 /	F-1r by len'	MUD HANG	
ŊB-1	6	30-01.1	88-06.5	cq'by B-2 732 - estimated	E-1"	£.\$6	79.8 - undetermined methods undocumented, f
ž (B-1	1	30-01.36	88-07.18	49' by D-2 73'-estimated	E-1/	67.}	unverified
B-2	2-3	30-05.05	88-06.45	69.5	E-1~	64.5	
C-3	1-2	30-07.33	88-01.05	62.5/	C-4√	52.5/	
D-2	2-3	30-01.38	88-07.16	6 p. 5	E-1"	46	
G <u>-</u> 1	8-9	30-04.01	88-02.47	68.5/	H-1 / by 66/	₩ IUD HANG	
G-2	7-8	30-05.20	88-03.12	6 % . \$	Not cleared M	IUD HANG	
G-3	7-8	30-04.59	88-02.62	65.5	Not cleared M	IUD HANG	
		500 500	tion 6. of	the M. S. fiel	Fuelus	tin Rangi	+

See section 6. of the Modified Evaluation Report.

ATTACHMENT V

STATISTICS

	DAY						DRAG	•
DATE	LETTER	STRIP	VOL.	POSITIONS	L.N.M.	S.N.M.	LENGTH	REMARKS
				_				
08 JULY	A	1	I	8	1.1	1.65	12000	MUD HANG
09 JULY	В	1	I	1-6	0.7	1.27	9600	ITEM 11B POSITION \
09 JULY	В	2	I	7-11	0.7	0.42	4800	HUNG FISH HAVEN
09 JULY	В	3	I	12-22	3.0	3.16	9600	CLEARED 11B WRECK
10 JULY	С	1	I	1-6	0.8	0.56	4800	EXCESSIVE LIFT
10 JULY	С	2	I	7-11	1.0	0.5	3600	FAILED TO HANG GRACIE L
10 JULY	C	3	I	12-15	0.8	0.4	3600	HUNG GRACIE L
10 JULY	С	4	I	16-20	0.9	0.54	3600	CLEARED GRACIE L
10 JULY	С	5	I	21-28	1.95	2.34	9600	ITEM 10B
11 JULY	D	1	I	1-7	1.2	1.0	6400	ANCHORAGE AREA
11 JULY	D	2	I	8-11	0.7	0.4	4800	CLEARING ATTEMPT 11B
12 JULY	E	1	I	1-9	1.8	0.64	4800	CLEARED 11B
16 JULY	F	ī	II	1-23	3.9	5.85	12000	ANCHORAGE AREA //
17 JULY	G	1	II	1-20	2.4	3.6	12000	MUD HANG //
17 JULY	G	2	II	21-25	0.5	0.5	8000	MUD HANG //
17 JULY	Ğ	3	II	26-33	0.7	0.7	8000	MUD HANG
18 JULY	Н	1	II	1-10	1.7	1.7	8000	CLEARED ANCHORAGE
18 JULY	H	2	II	11-15	0.5	0.2	2400	ITEM 59
18 JULY	H	3	II	16-21	1.3	1.3	8000	ITEM 13B
TO JULI	11	3	11	10-21	1.5	1.5	3000	/

See section 6. of the Modified Evaluation Report for hangs, groundings, and clearances.



U.S. DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SURVEY Rockville, Md. 20852

APR 10 TO

Attachment VIII

Commanding Officer
NOAA Ships RUDE and HECK

PROJECT INSTRUCTIONS: OPR-479-RU/HE-73, Safety Fairways, Gulf of Mexico, dated January 26, 1973

Change No. 1: Supplement to Instructions

- 1. Charts covering the area of the planned 1973 field operations in the vicinity of the approaches to Mobile Bay Channel, Ship Island Pass, Southwest Pass, Calcasieu Pass, and Aransas Pass have been examined to update the Pre-Survey Review.
- 2. The following items should be added for investigation during the course of the project:

MOBILE BAY CHANNEL APPROACHES -- CHART 1115

Primary Item #16A.

The sunken wreck PA charted in lat. 30°09.5', long. 87°41.5' was reported to lie in 42 feet of water with about 3 feet of water covering its bow and 10 feet of water over its stern. It was reported to be marked with a red-lighted buoy. Source is N. to M. 10 of 1965.

Primary Item #17A.

A possible obstruction has been reported in approximate lat. 30°08', long. 88°05.4'. A sharp rise in the bottom from charted depths of 50 feet to a depth of 28 feet was reported at the above position according to L.N. to M. 10 of 1973.

Secondary Item #8B.

The <u>sunken wreck</u> charted in lat. 30°12', long. 88°01' was reported to be the F/V PEGGY G. The first report, L.N. to M. 33 of 1969, indicated 12 feet of the mast to be exposed above water. A later report, L.N. to M. 40 of 1969, indicated that the mast had broken off and no part of the wreck was exposed above water.

Secondary Item #9B.

The obstruction fish haven charted between lat. 30°05.5', long. 87°45.0' and lat. 30°10.6', long. 87°31.7' is reported by Chart Letter 921 of 1959 to consist of groups of 50 to 100 car bodies placed at half-mile intervals along and just outside the 10-fathom curve. The northeastern portion of this fish haven, which falls within and adjacent to the Safety Fairway, should be investigated.

Secondary Item #10B.

The <u>submerged wreck</u> charted in lat. 30°11.79', long. 87°56.45' was reported to be the wreck of a barge, used for docking seaplanes, which capsized and sank. The position is approximate. The source is N. to M. 3 of 1920.

July (21)

July (27)

Secondary Item #11B.

The sunken wreck charted in lat. 30°00.0', long. 88°05.0' is the cargo ship TULSA, No. 821, U.S. Navy Wreck List, 605 tons, sunk in 1943. The position is approximate. While investigating this wreck, it would be desirable to include the obstruction fish haven charted in lat. 30°01.0', long. 88°06.5' which is reported to be a sunken drydock. Source is Chart Letter 338 of 1960.

Secondary Item #12B.

The obstruction on Chart 1266 in lat. 30°16.0', long. 88°02.1' was reported by N. to M. 47 of 1961 to be an unidentified object lying in depths of 13 feet and covered by 11 feet of water. The position is approximate.

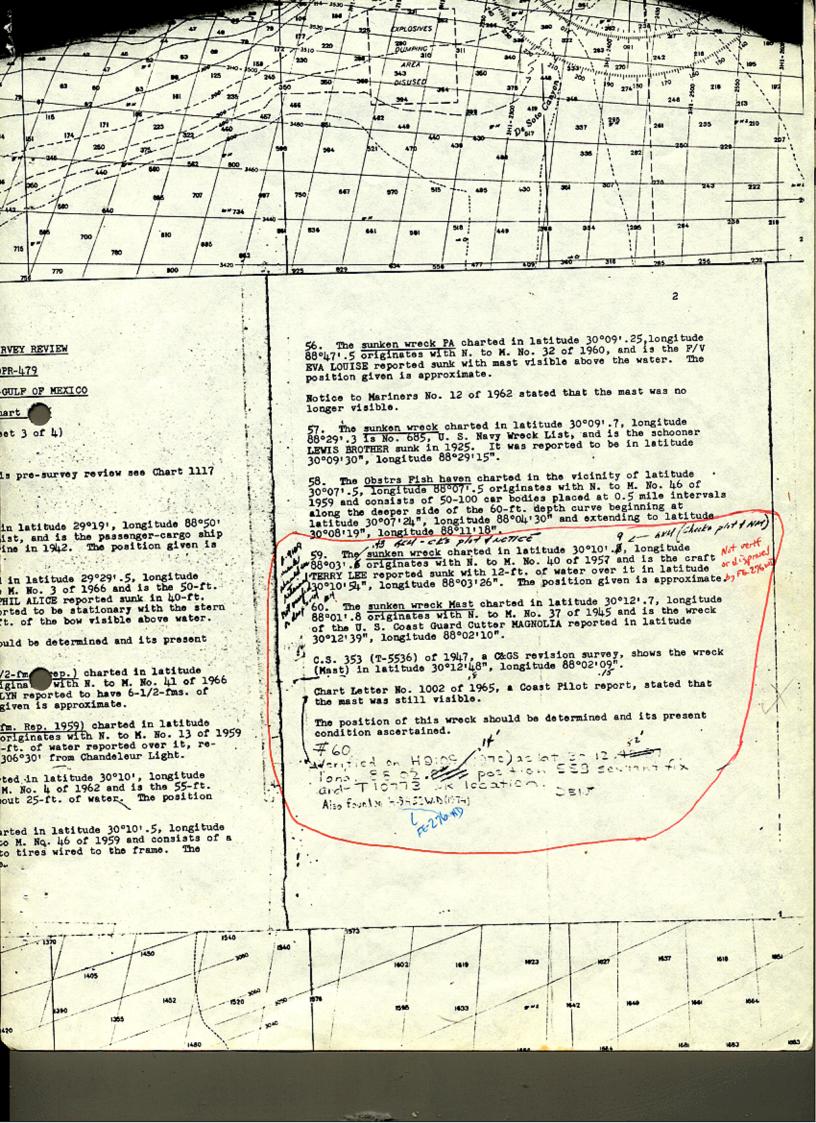
Secondary Item #13B.

The sunken wreck PA on Chart 1266 in lat. 30°16.8', long. 88°03.6' was reported to exist by N. to M. 55 of 1972. The position is approximate.

SHIP ISLAND PASS APPROACHES -- CHART 1115

Secondary Item #14B.

The submerged wreck charted in lat. 29°45.0', long. 88°36.5' was reported to be the 53-foot F/V MARION D which sank in



64 feet of water. The position is approximate. The source is N. to M. 28 of 1967.

Secondary Item #15B.

The proposed fish haven (uncharted) in lat. 30°04.9', long. 88°36.9' is reported to be one of four sunken wreck sites at which a permit has been issued to construct artificial fish havens. Each fish haven is to consist of about an acre of auto bodies, appliances, culvert pipe, oil pipeline, riprap, concrete rubble, etc., and is to be marked by a buoy. No wreck is charted at the above position. However, wrecks are presently charted at the remaining three sites and are discussed in Pre-Survey Review items numbers 54, 56, and 57. No progress report has been received. Source is Chart Letter 1453 of 1969.

SOUTHWEST PASS APPROACHES -- CHART 1116

Primary Item #18A.

An <u>obstruction</u> in lat. 28°36', long. 89°38' (approximate position) was reported struck by the M/V LIANDOS. This position plots near the center of the Safety Fairway approaching the Mississippi River Entrance. Source is L.N. to M. 43 of 1972.

Primary Item #19A.

A <u>submerged obstruction</u> in lat. 28°49', long. 89°25' has been reported to be the underwater remains of an oil drilling rig J. STORM II which burned. Nothing remains above the water surface. The position is approximate. Source is L.N. to M. 99 of 1972.

CALCASIEU PASS APPROACH -- CHART 1116

Secondary Item #16B.

A sunken wreck was reported to exist in approximate lat. 29°26'49", long. 93°04'49" covered by 40 feet of water. This wreck is unidentified. Source is L.N. to M. 63 of 1972.

OPR-479-RU/HE-73 Change No. 1

Secondary Item #17B.

Three shoals were reported by Chart Letter 1764 of 1972 to exist in the following positions determined by LORAN:

Lat.	Long.	<u>Depth</u>
28°21.2'	92°27.6'	80 ft.
28°20.8'	92°27.5'	70 ft.
28°21.6'	92°27.1'	105 ft.

These shoal spots are reported by a diver to be 400 to 600 yards in diameter.

Secondary Item #18B.

The submerged wreck in lat. $28^{\circ}32^{\circ}$, long. $93^{\circ}12^{\circ}$ is the F/V WAHOO reported burned and sunk in 22 fathoms of water. The position is approximate. The source is L. N. to M. 19 of 1973.

ARANSAS PASS APPROACHES -- CHART 1117

Primary Item #20A.

The sunken wreck PD in approximate lat. 27°46.6', long. 97°03.1' has been reported to be a 40-foot boat sunk in 44 feet of water. Attempts to locate the wreck were unsuccessful. Source is L.N. to M. 10 of 1973.

Secondary Item #19B.

The <u>sunken wreck PA</u> in lat. 28°09', long. 96°27' has been reported to be the 72-foot vessel LYCO I which burned and sank. Source is L.N. to M. 9 of 1973.

- 3. With the addition of the above items, the Pre-Survey Review dated January 31, 1968, updated to May 17, 1971, of Charts 1115 and 1117 can be considered updated to April 10, 1973.
- 4. The Pre-Survey Review (of Chart 1116) dated January 31, 1968, and updated to November 28, 1969, June 23, 1971, and April 19, 1972, can now be considered updated to April 10, 1973.















- 5. Investigations to resolve pre-survey review items can be made in conjunction with routine area dragging with supplemental drag strips used as required to prove or disprove the existence of each item and to obtain final cleared depths over obstructions.
- 6. Any supplemental drag strips used to investigate presurvey review items shall extend over the area within a radius of 1/2 mile from the charted positions. In the case of doubtful positions, PD or PA, investigations shall cover the area within one mile from reported positions except that investigations shall not exceed the limits of safe navigation for the RUDE/HECK and need not be extended extensively outside of the project limits.
- 7. All pre-survey review items shall be identified by divers, if possible, and cleared from two directions if not hung to eliminate the possibility of the ground wire passing over a slanting object. All hangs on obstructions shall be cleared as specified in Section 3-20, Wire Drag Manual. Obtain least depths by diver's hand lead or Bryson Gage to determine clearance drag depth.
- 8. Liaison shall be maintained with local fishermen and military authorities for the purpose of coordinating activities and determining additional reported obstructions to navigation. Any such additional items shall be made a part of these instructions. No work shall be done in restricted areas against the advice of military officials.
- 9. Results of the investigation for each item shall be reported to C32, through AMC, along with specific charting recommendations as soon as practicable after investigation is completed.

The second secon

10. Receipt of this change shall be acknowledged.

Robert C. Munson

Associate Director

Office of Marine Surveys

and Maps

ATTACHMENT IX

CHART CORRECTIONS

It is suggested that the following action be taken:

- 1. ITEM 59 LAT. 30°10.80'N, LONG. 88°03.59'W a charted wreck, should be removed from charts. Do not concur.
- 2. ITEM 10B a charted wreck at LAT. 30°11.79', LONG. 87°56.45' should be removed from the charts. Do not concur.
- 3. F/V GRACIE L, a charted obstruction at LAT. 30°07'35'

 02.9"

 LONG. 88°01'25' be recharted for a cleared depth. of 52.5 feet

 smooth
 based on predicted tides.— Concar

See section 6. of the Modified Evaluation Report for charting recommendations.

ATTACHMENT X GP'S TO BE PRINTED ON BOATSHEET

1.	DAUPHIN ISLAND WATER TANK, 1956	30-15-11.959" 88-06-44.901"
2.	SAND ISLAND LIGHTHOUSE, 1930	30°-11'-14.8260" 88°-03'-02.2355"
3.	DAUPHINT ISLAND E. RADAR DOME, 1960	30°-14′-59.635″ 88°-04′-42.266″
4.	,usaf Dauphint Island,w. Radar dome, 1960	30 ² -14 ² -59.618" 88 ² -04 ² -43.026"
5.	MOBILE POINT C.G. RADIO TOWER, 1958	30°-13'-37.658" 88°-01'-24.859"
6.	PASS AUX HERONSRANGE [™] C [™] REAR LT.	30-15-27.780" 88-12-47.055"
7.	PASS AUX HERONSRANGE D™ REAR LT.	30-16-14.898" 88-08-59.653"
8.	DAUPHINK ISLAND BR. N. AERO OBST. LT.	30°-17'-21.201" 88°-07'-43.458"
9.	DAUPHINT ISLAND BRIDGE SOUTH AERO OBST. LIGHT	30°-17'-19.133" 88°-07'-42.450"
10.	WEEKS, 1935	30°-21'-41.859" 87°-50'-04.256"
11.	EDITH ₃ /935	30°-14'-19.726" 87°-53'-16.897"
12.	COLLINS, 1935	30-14-31.599" 87-51-16.497"



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL OCEAN SERVICE OFFICE OF CHARTING AND GEODETIC SERVICES ROCKVILLE, MARYLAND 20852

April 29, 1986

N/CG243:GHM

TO:

FROM:

N/MOA232 - Rudolph D. Sanocki,

Morthgranis
N/CG243 - George H. Mastrogianis**

SUBJECT:

Rescission of Hydrographic Registry Number and REISSUE

The following hydrographic registry number, H-9452 WD, is rescinded this date by direction (N/MOA232 - R. Sanocki), and reissued as FE-276 WD.

RESCISSION

Registry No.

H-9452 WD

REISSUE

Registry No.

Field No.

Area

Project No.

FE-276 WD

RH-40-2-74

ALABAMA

OPR-479

GULF OF MEXICO APPROACHES TO MOBILE BAY

cc:

N/MOA2x1 - Bouchard N/MOA23 - MacFarland N/MOP21 - Richards N/CG24x2 - Wellman



U.S. DEPARIMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY

November 19, 1979

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic

Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 873-5180 Dauphin Island, AL

Period: July 8-18, 1974

FE-276 WD

HYDROGRAPHIC SHEET: R/H 40-2-74 H=9452

OPR: 479

Locality: Outside Mobile Bay Entrance, Alabama

(Gulf coast low water datum): 2.60

Height of Mean High Water above Plane of Reference is

REMARKS: Zone direct.

Chief, Datums and Information Branch

NOAA FORM 76-155 U.S. DEPARTMENT OF COMMERCE (11-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION					E S	SURVEY NUMBER				
GEC)GRAPI	HIC NA						FE-276	5 WD	
Name on Survey	A	OH CHART BON	PREVIOUS OF	SURVEY J.S. MAPS	ROM OCAL	CON LOCAL P	P.O. CUIDE	E OR MAP	u.s. Lieht	LIST
ALABAMA (title)										1
GULF OF MEXICO (title			<u> </u>		-					2
MOBILE BAY (title)										3
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										24
NOAA FORM 76-155 SUPERSEDES CO	GS 197									25

HYDROGRAPHIC SURVEY STATISTICS REGISTRY NO.: FE-276WD

Number of positions		310
Number of soundings		N/A
Number of control stations		8
	TIME-HOURS	DATE COMPLETED
Preprocessing Examination	0	
Verification of Field Data	99	03 MAY 1986
Quality Control Checks	4	
Evaluation and Analysis	58	22 MAY 1986
Final Inspection	22	16 MAY 1986
TOTAL TIME	183	
Marine Center Approval		22 MAY 1986

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

APPROVAL SHEET

All records of this survey prior to smooth plotting are hereby approved. The field work was personally supervised by the undersigned and the boatsheet and records were inspected daily. The survey is considered complete and adequate for charting.

Commanding Officer

NOAA Ships RUDE & HECK

ATLANTIC MARINE CENTER MODIFIED EVALUATION REPORT

SURVEY NO.: FE-276WD FIELD NO.: R/H-40-2-74

Alabama, Gulf of Mexico, Approaches to Mobile Bay

SURVEYED: July 8 through July 18, 1974

SCALE: 1:40,000 PROJECT NO.: OPR-479-RU/HE-74

& Change #1 to OPR-479-RU/HE-73

SOUNDINGS: Wire Drag CONTROL: Raydist DR-S

(Range-Range)

Visual

(Sextant Cuts)

Chief of Party.....L. E. Pickens

.....K. F. VanTrainG. M. Albertson

1. INTRODUCTION

- a. The purpose of this survey is adequately defined in the Descriptive Report. Processing of this survey has been modified so that only hangs, groundings, a detached position and clearance depths over the hangs, groundings, and the assigned charted features were verified and are addressed in this report. Only the verified hangs, one detached position, and accompanying notes have been smooth plotted. Data not pertaining to the hangs, groundings, and the assigned charted features (Presurvey Review Items) has not been processed. This modified and limited processing is considered complete in regard to nautical charting requirements.
- b. Four plots of five verified hangs, one detached position, and accompanying notes were generated and are attached to this report. Other verified hangs, groundings, and clearance depths not smooth plotted are addressed in section 6. of this report. These plots are considered the final plots or smooth sheets for this survey.
- c. This survey was originally registered as survey H-9452WD for which the registry number has subsequently been rescinded.
- d. Corrections and notes made by the evaluator to the Descriptive Report are denoted in red ink.

2. CONTROL AND SHORELINE

- a. Horizontal control stations used during this survey are of Third Order, Class I accuracy or better, and are established on the North American Datum of 1927 with the exception of Raydist control station MOB which cannot be verified as no records on this station are available. Positioning and calibration methods are adequately discussed in the Descriptive Report.
- b. No shoreline was plotted on the smooth plots due to modified and limited processing. Shoreline, in the context of this survey, is not considered necessary in regard to nautical charting requirements.

3. HYDROGRAPHY

The only soundings taken on this survey are of reconnaissance value only and not suitable for charting except as "reported" soundings. See section I. of the Descriptive Report.

4. CONDITION OF SURVEY

The adequacy of the final field sheets, survey records, and reports, and conformity to the requirements of the HYDROGRAPHIC MANUAL and the WIRE DRAG MANUAL were not considered during the modified processing of this survey. Only the deficiencies of this survey to adequately investigate and resolve some of the assigned items are noted since they impact charting recommendations made in section 6. of this report.

5. JUNCTIONS

This survey junctions with survey H-9374WD (1973), R/H-40-1-73. Since only modified and limited processing was accomplished on this survey, no junction was effected. Survey H-9374WD (1973) is considered a prior survey and is addressed in section 6. of this report.

6. COMPARISON WITH SURVEYS

a. PRIOR SURVEYS

H-8526 (1960) 1:10,000 H-8524 (1960) 1:10,000 H-6688 (1941) 1:40,000 H-4171 (1920) 1:80,000 H-4023a (1917-18) 1:40,000

These listed prior hydrographic surveys are common to all of the assigned Presurvey Review Items investigated

by the present survey. Assigned Presurvey Review Items #8B (AWOIS #2659), #10B (AWOIS #0445), #13B, #59 (AWOIS #3637), #60 (AWOIS #0449), and one grounding on the present survey are addressed as follows:

Assigned Presurvey Review Item #8B, presently AWOIS #2659 (the dangerous sunken wreck, PA of the F/V PEGGY G first reported by LNM No. 33 of 1969 and later by LNM No. 40 of 1969, charted in Latitude 30°12'N, Longitude 88°01'W) was not investigated by the present survey. It is recommended that this wreck be retained as presently charted.

Assigned Presurvey Review Item #10B(presently AWOIS #0445), the dangerous sunken wreck of a barge originating with NM No. 3 of 1920, position approximate, charted in Latitude 30°11.79'N, Longitude 87°56.45'W. The charted position was cleared by 38 feet in one direction only. Since the one nautical mile radius circle of search was not completed, this wreck is not disproved, however sufficient data was gained to change the charted notation from position approximate to position doubtful. It is recommended that this dangerous sunken wreck be retained as charted but with the "PD" notation. There is no conflict between present effective depths and prior hydrography within the common area.

Assigned Presurvey Review Item #13B (presently no AWOIS number assigned) is the <u>dangerous sunken wreck</u>, position approximate, charted in Latitude 30°16.8'N, Longitude 88°03.6'W reported by NM No. 55 of 1972. Only one strip (H-Day, Strip #3) was run on this item and this strip was not useable due to uncontrollable lift as noted in section I. of the Descriptive Report. It is recommended that this <u>dangerous sunken wreck</u>, PA, remain as presently charted.

One small strip on the present survey partially covers assigned Presurvey Review Item #59 presently AWOIS #3637 (the dangerous sunken wreck (12 ft rep) of the TERRY LEE, position approximate, originating with NM No. 40 of 1957, charted in Latitude 30°10'54"N, Longitude 88°03'26"W) by an effective depth of 11 feet. This wreck was not found and no indications of a hang were noted. It is recommended that this dangerous sunken wreck (12 ft rep) remain as presently charted.

A detached position was taken by the present survey on the visible <u>mast</u> of assigned Presurvey Review Item #60 presently AWOIS #0449 (the <u>dangerous sunken wreck</u> of the U.S. Coast Guard Cutter MAGNOLIA, originating with NM No. 37 of 1945). The present survey located this visible <u>mast</u> in Latitude 30°12'46.8"N, Longitude 88°02'09.1"W which is approximately 70 meters south of the prior survey's position. This minor difference in present and prior

positions possibly could be due to the different methods of positioning or even some movement of the wreck as the area where this wreck lies is reported to have strong and swift currents. It is recommended that this wreck be charted as a dangerous sunken wreck in accordance with present survey but without the "mast" notation. A National Ocean Service hydrographic field party presently in the area reports the mast is no longer visible.

A grounding at 62 feet in Latitude 30°07'55"N, Longitude 88°01'10"W and cleared by 58 feet on H-9374WD (1973) is in prior depths of 63-64 feet. It is recommended that this grounding not be charted.

Assigned Presurvey Review Item #11B (two parts, presently AWOIS #0436 and #3603), the present survey hang on a sunken wooden vessel (presently AWOIS #3604), the four mud hangs and five groundings which are common to subsequent hydrographic survey H-10206 (1985) are deferred to the comparison with H-10206 (1985) in section 6.b. of this report. They are listed as follows:

Latitude	Longitude
30°00'N	88°05'W
30°01'03.7"N	88°06'27.3"W
30°01'16.5"N	88°07'10.6"W
30°05'10"N	88°03'06"W
30°04'47"N	88°02'38"W
30°04'01"N	88°02'21"W
30°04'00"N	88°04'55"W
30°04'20"N	87°59'30"W
30°03'42"N	88°05'26"W
30°00'26"N	88°05'44"W
29°59'46"N	88°03'53"W
29°59'20"N	88°04'58"W
	30°00'N 30°01'03.7"N 30°01'16.5"N 30°05'10"N 30°04'47"N 30°04'01"N 30°04'00"N 30°04'20"N 30°03'42"N 30°00'26"N 29°59'46"N

The <u>sunken wreck</u> of the F/V GRACIE L (presently AWOIS #3646) in Latitude 30°07'18.8"N, Longitude 88°01'02.9"W is addressed and charting recommendations made in the comparison with survey H-9374WD (1973) in section 6.c. of this report.

It is not the intent of the present survey to supersede but only to supplement prior hydrography.

b. SUBSEQUENT SURVEY

H-10206 (1985) 1:40,000

Subsequent survey H-10206 (1985) is presently an unverified survey and comparisons were made with the final field sheet and Descriptive Report. This survey is common to both portions of Item #11B, the hang on a sunken wooden vessel, four mud hangs, and five groundings. The assigned item, hangs, and groundings are addressed as follows:

Presurvey Review Item #11B (AWOIS #0436), the nondangerous sunken wreck of the cargo ship TULSA, position approximate, in Latitude 30°00'N, Longitude 88°05'W, originating with the U. S. Navy 1957 Wreck List as item 821 was not located but the charted position was cleared by an effective depth of 78 feet in one direction. Subsequent depths at the charted position are 77 feet. Insufficient work was accomplished (the one nautical mile radius circle of search was not completed) to disprove this wreck, however sufficient work was accomplished to change the charting status of this wreck. It is recommended that this nondangerous sunken wreck be retained as charted but with the "PD" notation.

Presurvey Review Item #11B (AWOIS #3603), an obstruction fish haven charted in Latitude 30°01.0'N, Longitude 88°06.5'W, believed found by the present survey is a hang on debris (chain, anchor, a cylindrical object, and railroad rails) which covers an area approximately 100 feet in diameter in Latitude 30°01'03.7"N, Longitude 88°06'27.3"W. This present survey hang on debris cannot be assured to be the described fish haven which was reported to be a sunken drydock. A side scan sonar investigation by survey H-10206 (1985) supports the findings of debris by the present survey. There were no apparent conflicts with present survey cleared depths and the findings of survey H-10206 (1985). This debris was hung at 69 feet, cleared by 67 feet, and is in subsequent depths of 79 feet. This fish haven is presently charted (1985) with a cleared by 11-fathom depth. It is recommended that this hang on debris (obstruction fish haven) be charted in accordance with the results of the present survey.

A sunken wreck (presently AWOIS #3604) of a wooden vessel was hung at 69 feet in Latitude 30°01'16.5"N, Longitude 88°07'10.6"W, cleared by 66 feet, and is in subsequent depths of 79 feet. The possibility exists that this wreck may be either the wreck of the cargo ship TULSA or the sunken drydock (Item #11B, AWOIS #0436 and #3603) but due to the diver's description and the extreme degree of deterioration it was not possible to make a determination and is considered doubtful that this wreck is either the TULSA or the sunken drydock. This wreck is presently charted (1985) as an 114-fathom cleared depth with a "Wk" notation. It is recommended that this sunken wreck be charted as a wreck with a cleared by wire drag depth of 11 fathoms.

A <u>mud hang</u> (not diver verified) at 68 feet in Latitude 30°05'10"N, Longitude 88°03'06"W and cleared by 67 feet on H-9374WD (1973) is in subsequent depths of 69 feet. It is recommended that this <u>mud hang</u> not be charted as no conflict exists.

A <u>mud hang</u> (not diver verified) at 66 feet in Latitude $30^{\circ}04'47"N$, Longitude $88^{\circ}02'38"W$ and not cleared is in subsequent depths of 70 feet. It is recommended that this <u>mud hang</u> be charted as a <u>66-foot sounding</u> in accordance with the results of the present survey.

A <u>mud hang</u> (diver verified) at 68 feet in Latitude 30°04'01"N, Longitude 88°02'21"W and cleared by 67 feet is in subsequent depths of 71 feet. It is recommended that this <u>mud hang</u> not be charted as insufficient conflict exists.

A <u>mud hang</u> (diver verified) at 69 feet in Latitude 30°04'00"N, Longitude 88°04'55"W and cleared by 67 feet is in subsequent depths of 74 feet. A 70-foot shoal exists on this subsequent survey approximately 500 meters northeast of this hang and the possibility exists that this shoal may have migrated due to the currents in the area during the 11 years between the present and subsequent surveys. It is recommended that this <u>mud hang</u> be charted as a 69-foot sounding in accordance with the results of the present survey.

A grounding at 62-64 feet in Latitude 30°04'20"N, Longitude 87°59'30"W and partially cleared by 49 feet, 56 feet, 60 feet, and 61 feet on H-9374WD (1973) is in subsequent depths of 57-62 feet. It is recommended that this grounding not be charted.

A grounding at 69 feet in Latitude 30°03'42"N, Longitude 88°05'26"W and not cleared is in subsequent depths of 69 feet. It is recommended that this grounding not be charted.

A <u>grounding</u> at 79 feet in Latitude 30°00'26"N, Longitude 88°05'44"W and not cleared is in subsequent depths of 77 feet. It is recommended that this <u>grounding</u> not be charted.

A grounding at 79 feet in Latitude 29°59'46"N, Longitude 88°03'53"W and not cleared is in subsequent depths of 72 feet. The upright was set too deep and shoaling has occurred over the years in this area. It is recommended that this grounding not be charted.

A grounding at 84 feet in Latitude 29°59'20"N, Longitude 88°04'58"W and not cleared is in subsequent depths of 83 feet. It is recommended that this grounding not be charted.

It is the intent of the present survey only to supplement subsequent hydrography of survey H-10206 (1985).

c. WIRE DRAG SURVEY

H-9374WD (1973) 1:40,000

Prior wire drag survey H-9374WD (1973) is not common to any of the assigned items but is common to the clearance work accomplished on the present survey in the fairway anchorage area and the sunken wreck of the F/V GRACIE L (presently AWOIS #3646). This wreck, two groundings, and a mud hang are common to this prior survey. The two groundings and the mud hang are adequately addressed in sections 6.a. and 6.b. of this report.

The <u>sunken wreck</u> of the F/V GRACIE L (AWOIS #3646) was originally located on this prior survey with a hang depth of 54 feet and a clearance depth of 24 feet. The present survey re-hung this wreck in Latitude $30^{\circ}07'18.8"N$, Longitude $88^{\circ}01'02.9"W$ at a hang depth of 62 feet and obtained a clearance depth of $52\frac{1}{2}$ feet. The greater clearance depth obtained by the present survey is due to the mast of the wreck being broken off (verified by divers). The current (1985) chart has a $52\frac{1}{2}$ -foot cleared depth with a "Wk" notation charted for this wreck. It is recommended that this <u>sunken wreck</u> be retained as charted in the present survey position.

7.	COMPARISON	WITH	CHARTS	1115	(17th	Ed.,	July	7,	<u> 1973)</u>
				1266	(27th	Ed.,	Nov.	17,	1973)
				11360	(29th	Ed.	, June	15	, 1985)
				11376	(38t)	Ed.	, Oct.	26	, 1985)
				11378	(21st	Ed.	, Mar.	22	, 1986)

a. HYDROGRAPHY

The charted hydrography originates with the previously discussed prior surveys and miscellaneous sources not readily available. The previously discussed prior surveys require no further consideration. The sources of all assigned items are adequately described in Change No. 1 (dated April 16, 1973) to the Project Instructions OPR-479-RU/HE-73 (dated January 26, 1973). This change is contained in the Descriptive Report for reference. All necessary comparisons with charted features and hydrography are adequately addressed in section 6. of this report. As only modified and limited processing was accomplished on this survey, only the verified data relevant to dangers found and charted dangers were used in these comparisons.

b. Aids To Navigation

One fixed aid to navigation was used as a visual control station and was listed in Attachment I of the Descriptive Report during verification. One fixed aid to navigation was used for Raydist calibrations. Two other

fixed aids to navigation are listed in Attachment X. of the Descriptive Report. All four fixed aids to navigation were verified during modified processing. Three floating aids to navigation were located by this survey as noted in Attachment III. of the Descriptive Report. None of these floating aids to navigation were verified. It is recommended that these floating aids to navigation be charted in accordance with the most current available information.

8. COMPLIANCE WITH INSTRUCTIONS

Compliance of this survey with the Project Instructions was not considered during this modified processing except as noted in section 6. of this report in regard to criteria for disproval of assigned items.

9. ADDITIONAL FIELD WORK

In general, the adequacy of this survey was not considered during modified processing except as it serves charting needs. Additional field work is recommended on Presurvey Review Items #8B (AWOIS #2659), #10B (AWOIS #0445), #11B (AWOIS #0436), #13B, and #59 (AWOIS #3637) as insufficient work was accomplished for resolution of these items. Also additional field work is recommended on the mud hang at 66 feet in Latitude 30°04'47"N, Longitude 88°02'38"W and the mud hang at 69 feet in Latitude 30°04'00"N, Longitude 88°04'55"W as these mud hangs are in conflict with both prior and subsequent hydrography.

Maurice B. Hickson, III

Cartographer

Modified and Limited Verification of Field Data

Modified and Limited Evaluation and Analysis

INSPECTION REPORT FE-276WD

The completed survey has been inspected with regard to survey coverage, investigation of hangs and clearance depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

R/D. Sanocki

Chief, Hydrographic Surveys

Processing Section

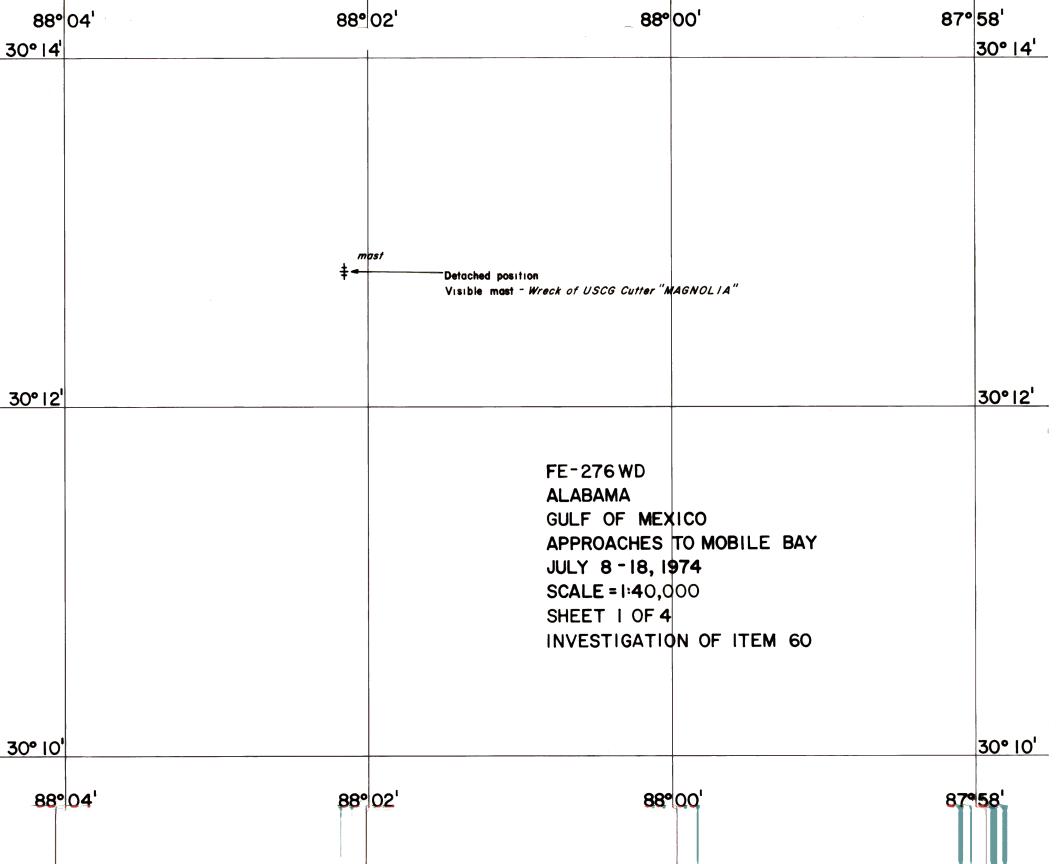
Hydrographic Surveys Branch

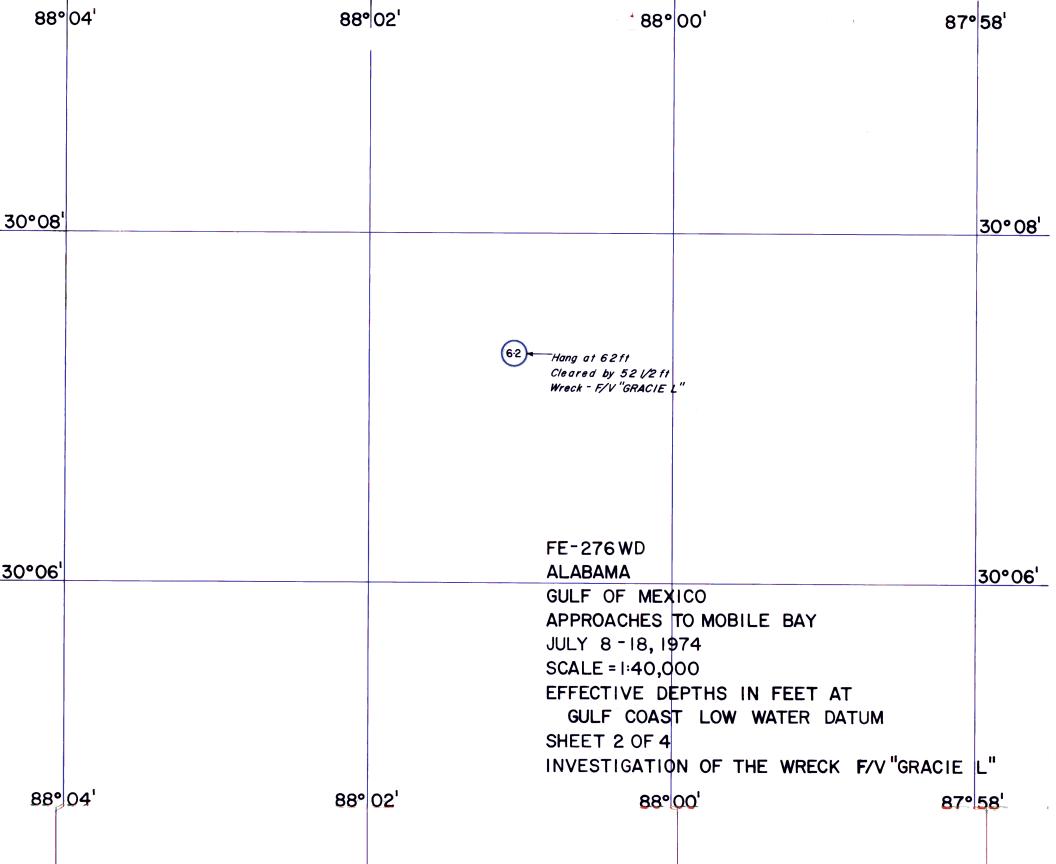
David B. MacFarland, Jr., CDR, NOAA Chief, Hydrographic Surveys Branch

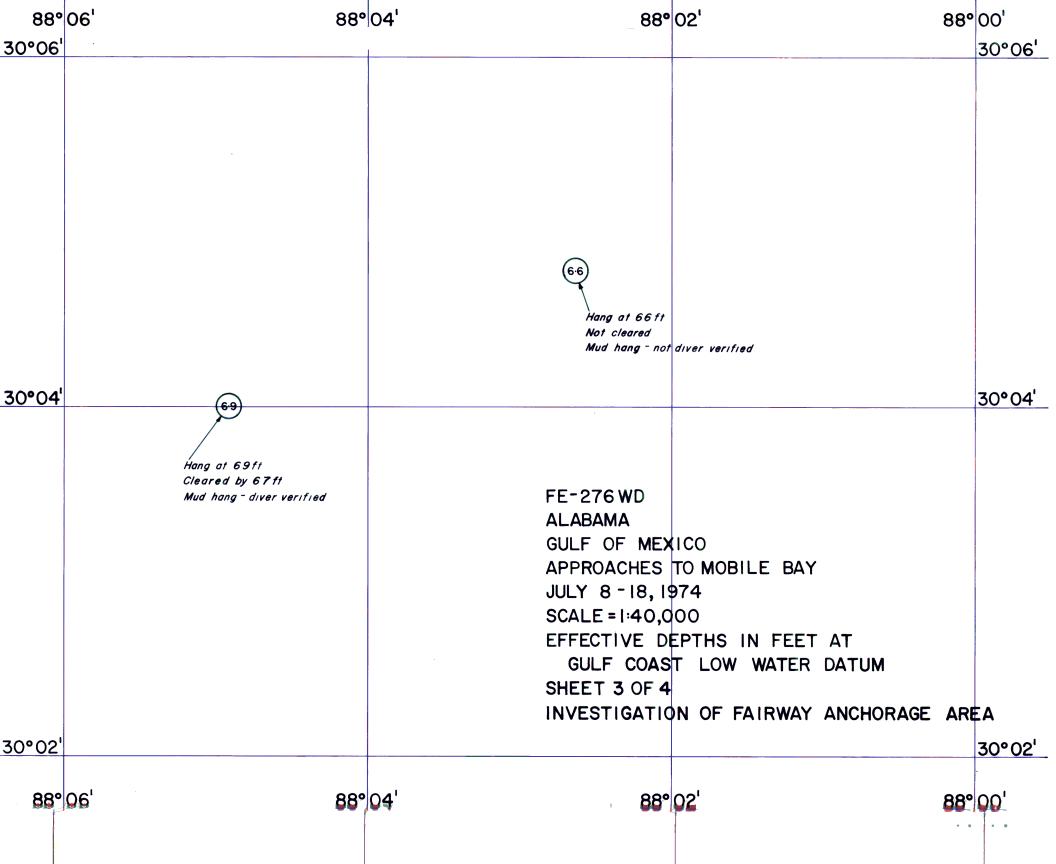
Approved May 22, 1986

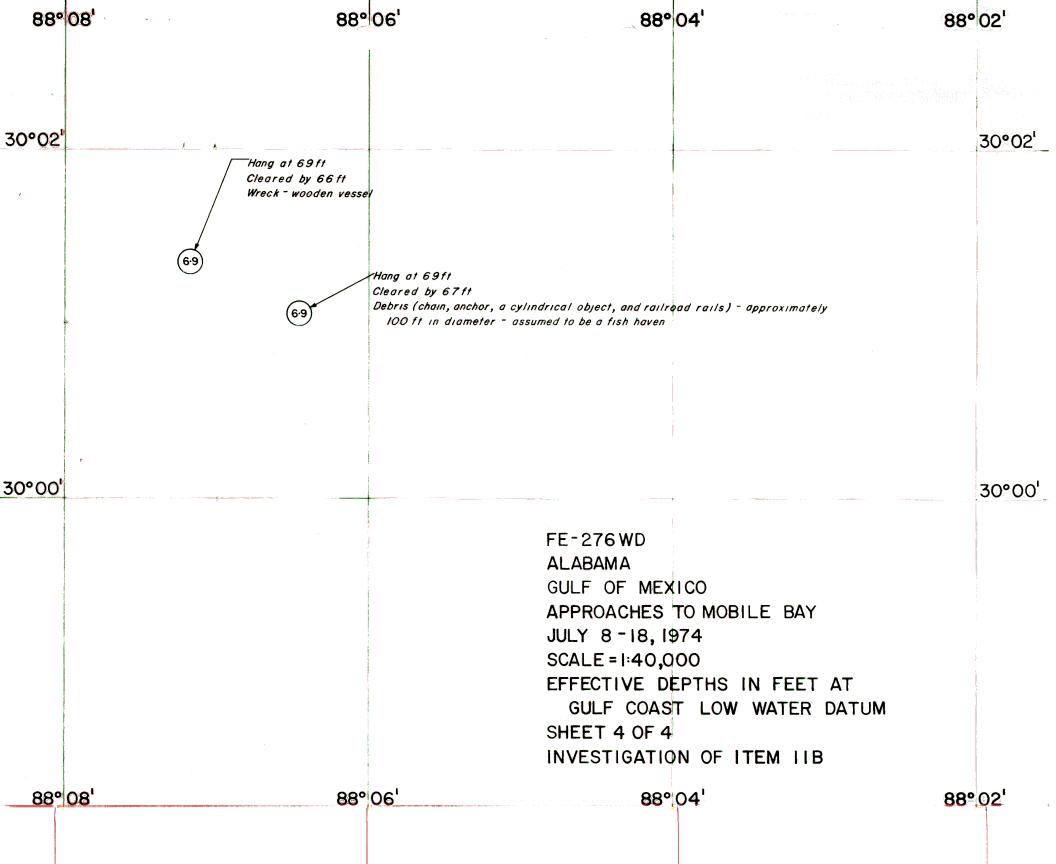
Wesley V. Hull, RADM, NOAA

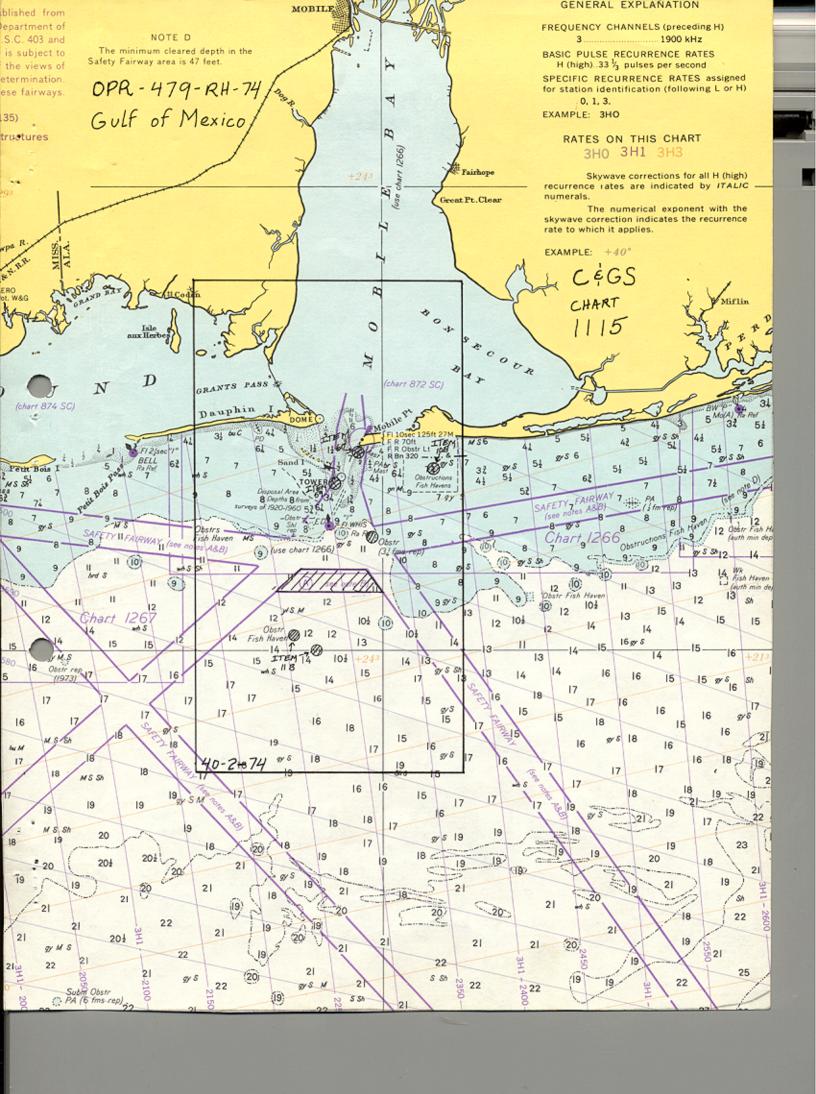
Director, Atlantic Marine Center











Q Falco Perdido ALABAMA FLORIDA Munson Gateswood MOBILE BAY BON SECOUR LITTLE PT. CLEAR Diagram H-9374△ INDEX HYDROGRAPHIC SURVEYS HYDROGRAPHIC SURVEYS Date 1970 1973 Scale 20.000 40.000 No. H-9109 H-9374∆ Complete through August 1978 30°00 1970-1973 On Scales of 1:10000 6.34 inches=1 statute mile 1:20000 3.17 inches=1 statute mile CHOCTAWHATCHEE BAY - MOBILE BAY No. △-Wire drag FLORIDA-ALABAMA 85

COMMERCE spheric Administration

86*30"

MARINE CHART BRANCH RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE BEHORT OF SURVEY NO

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.

2. In "Remarks" column cross out words that do not apply.

		, if any, from recommendations	made under "Comparison with Charts" in the Review.
CHART	DATE	CARTOGRAPHER	REILARKS
411	10-14-86	Duylie WHO.	Full Part Before After Marine Center Approva Signed Via
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		NATIONAL OCEANIC AN	AL OCEAN SURVEY
11376	12-19-80		Full Part Before After Marine Center Approval Signed Via
-11-3-14	12 11 00	DESCRIP	Tal No REPORT
11		DESCRIP	
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(5)			Drawing No.
		Type of SurveyWir	e Dray
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11006	5/3/93		DOCALITY 38 EX, NC
			OCAETTI 30 EX, DE
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